AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A moving image watermarking method using a human visual system, comprising the steps of:

a) obtaining a watermark value by exclusive-ORing a random key value and a binary value of a logo image;

b) separately performing a plurality of masking operations;

c) obtaining a global masking value through the ~~separate~~ separately performed masking operations;

d) obtaining a watermarked frame value by adding a watermark value weighted by the global masking value and a control variable to an original frame value; and

e) inserting a watermark into a moving image frame using the watermarked frame value.

2. (original): The watermarking method according to claim 1, wherein the step b) comprises the steps of:

b1) performing a spatial masking operation; and

b2) performing a motion masking operation.

3. (original): The watermarking method according to claim 2, wherein the step b1) comprises the steps of:

adjusting contrast of the moving image frame; and

extracting edges from the contrast-adjusted frame.

4. (original): The watermarking method according to claim 2, wherein the step b2)

comprises the steps of:

obtaining a luminance difference between a current frame and a previous frame; and

extracting edges from the current frame.

5. (original): The watermarking method according to claim 2, wherein the step b)

further comprises the step of performing a frequency masking operation.

6. (original): The watermarking method according to claim 1, further comprising the

steps of:

comparing an image quality of the watermarked frame with an image quality set to a

target; and

decreasing a control variable by a predetermined value if the image quality of the frame

is less than the target image quality, and increasing the control variable by a predetermined

value if the image quality of the frame is greater than the target image quality.

7. (original): The watermarking method according to claim 6, wherein the image quality

is estimated on the basis of Peak-Signal-to-Noise Ratio (PSNR).

8. (currently amended): The watermarking method according to ~~any of~~ claim 1, further

comprising the step of f) extracting the watermark, the step f) comprising the steps of:

subtracting a watermarked frame value from an original frame value; and

exclusive-ORing the subtracted result value and a random variable obtained by a key

value, and obtaining the exclusive-ORed result.

9. (currently amended): A spatial masking method for use in watermarking a moving picture, comprising the steps of:

adjusting contrast of a moving image frame; and

extracting edges from the contrast-adjusted frame.

10. (currently amended): A motion masking method for use in watermarking a moving picture, comprising the steps of:

obtaining a luminance difference between a current frame and a previous frame; and

extracting edges from the current frame.

11. (original): A recording medium for storing computer programs for executing the method of claim 1 in a format readable by computers.

12. (new): The spatial masking method according to claim 9, further comprising storing the extracted edges in a recording medium.

13. (new): The spatial masking method according to claim 10, further comprising storing the extracted edges in a recording medium.